CANAMEX Corridor Segment "un" Wired for High-Speed Internet Homeland Security Border Grant Connects First Responders

The WiFi First Responder Pilot Project has recently given emergency personnel high-speed access to the Internet along the CANAMEX Corridor near Arizona's southern border. This project allows first responders to connect to the Internet from their vehicles across a 30-mile stretch of I-19 from Green Valley in Pima County to Rio Rico in Santa Cruz County. The project showcases technological solutions to problems such as network security, and increased access to telecommunications for first responders and rural areas.

To create this wireless network, the project built upon efforts already underway to make the CANAMEX Corridor a "smart corridor." According to State CIO Chris Cummiskey, "The CANAMEX 'smart corridor' improves the lives of people in neighboring communities and those traveling through it." Besides the obvious benefits to emergency responders using the system, the Wireless Project provides much-needed internet connectivity to schools, businesses, and residences near the corridor.

Created by Congress in 1995, the CANAMEX Corridor is a series of highways connecting Mexico and Canada via rural areas in Arizona, Nevada, Utah, Idaho and Montana. In Arizona, the corridor is 487 miles long, and extends through long expanses of rural areas which lack reliable cellular and landline telecommunication services.

The WiFi Pilot Project was funded by a grant from the Federal Department of Homeland Security's (DHS) Information Technology and Evaluation Program (ITEP) to improve information sharing and integration among first responders. The \$500,000 grant was awarded in May 2004, to the State of Arizona, in partnership with the Arizona Telecommunications and Information Council (ATIC). The WiFi Pilot Project was successfully completed on April 30, 2006. New expansion and sustainability is now being aggressively pursued by the project's private sector partner.

The primary focus of the grant was "securing" a wireless network for use by a wide spectrum of public and private participants. The project emulated other successful private uses of WiFi, such as a network deployed by Graham County for use by County law enforcement (in use for about four years). However, the project also provided a template of scalable standards of security, specific to the needs of many classes of users, including the use of encryption and virtual private networks.

Throughout the process, stakeholders such as local law enforcement, border patrol, and firefighters were consulted. Currently, there are about 50 first responders using this network. In addition, another 100 government and private sector agencies, along with many residents, are beginning to use this important infrastructure.

One key objective of the project was to test signal strength over miles of open space, given the foliage, hills, highway undulations, and other geographic challenges. Another key objective was to preserve a high-speed connection while driving at highway speeds. "Traveling at 70 miles per hour, first responders in Santa Cruz & Pima Counties are giving new meaning to the term 'High Speed Internet,'" said Cummiskey.









